

**ABSTRACT**

A pulse descriptor word (PDW) collector, including an extractor coupled to a computer, for passively collecting radio frequency (RF) data received by an electronic surveillance system (ESS). It is integrated into the ESS after a receiver (which converts RF pulse data to digitized PDWs) and parallel to a presorter. Using two RAM circuits, the extractor forms a read/write loop to ensure that no PDWs are lost in the collection process. The extractor simultaneously writes onto one RAM while reading from the other RAM to the computer. The read/write functions of the RAMs are switched at predetermined interrupts. Collected data is stored on the computer hard drive. The computer controls the entire collection process by using data management software, graphical user interface software and sequencing software. Stored data is available on demand for analysis and is used to monitor, assess, and update the threat identification capabilities of the particular ES system.